



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

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July 8, 2013

Mr. Brian S. Taylor
DCP Midstream, LP
370 17th Street Suite 2500
Denver, CO 80202

RE: Westfield
Transmittal No.: X256118
Application No.: WE-13-019
Class: *Submin*
FMF No.: 513735
AIR QUALITY PLAN APPROVAL

Dear Mr. Taylor:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Waste Prevention, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the proposed modification of Plan Approval #1-P-10-028, dated September 28, 2010, to increase the propane throughput and the associated volatile organic compound emissions for the facility located at 30 Summit Lock Road in Westfield, Massachusetts (“Facility”).

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control,” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Plan Approval.

This Plan Approval supersedes Plan Approval # 1-P-10-028 dated September 28, 2010, in its entirety.

1. DESCRIPTION OF FACILITY AND APPLICATION

DCP Midstream, LP currently operates the existing Westfield Propane Terminal pursuant to Plan Approval #1-P-10-028 which was issued on September 28, 2010. Due to increased demand for propane in the area, the facility is requesting to increase the propane throughput limitations associated with the truck loading and railcar offloading operations. The increased propane throughput will result in a potential increase of 0.5 tons of volatile organic compounds (VOCs) per year. Therefore, the facility has requested a total annual VOC emission rate limit of 1.5 tons per year. No physical equipment changes are being proposed.

The existing terminal consists of two-60,000-gallon, off-white, bullet propane storage tanks which have a diameter of 10'1" and a length of approximately 100'. The propane is delivered to the facility by railcar and is offloaded into the storage tanks using five rail towers (3 doubles & 2 singles). Approximately 60,000,000 gallons of propane per year will be offloaded from railcars into storage tanks which is an increase of 21,000,000 gallons of propane per year. At 30,000 gallons per railcar, there will be a maximum of 2,000 railcar offloads per year. Each propane storage tank is equipped with two loading racks for a total of four loading locations for transferring propane from the storage tanks into trucks. However, only two loading locations can be used at any time. Approximately 60,000,000 gallons of propane per year will be loaded into trucks which is an increase of 21,000,000 gallons of propane per year. At 10,000 gallons per loadout, there will be a maximum of 6,000 truck loadouts per year.

Emissions of propane, or VOCs, will be minimized through the use of a vapor balancing system during the offloading of railcars and the loading of trucks. A vapor balance system is a closed system that allows the transfer or balancing of vapors, displaced during the offloading or loading of propane, from the vessel being loaded to the vessel being unloaded. Therefore, no VOC emissions will be vented to atmosphere from the railcars, tanks or trucks during the offloading or loading of propane.

During the offloading of propane from railcar to tank, there will be two liquid hoses and one vapor hose that connect to each railcar. After each railcar offloading operation, a small amount of propane will remain in each hose between the block valves which will be emitted to atmosphere. To minimize the post offload fugitive VOC emissions, the length of hose between the block valves will be limited to no greater than 12 inches.

The loadout of propane from the tank to truck will use two hoses. After each truck loading operation, a small amount of propane will remain in each hose between the block valves which will be emitted to atmosphere. To minimize the post loadout fugitive VOC emissions, the length of hose between the block valves will be limited to no greater than 4 inches. The hose length of 4 inches is also the operational minimum.

Another small source of fugitive VOC emissions will be due to leaks from equipment such as valves, seals, connectors, flanges, etc.

DCP Midstream, LP has proposed a VOC emission limitation of 1.5 tons in any 12 consecutive month period which includes 0.02 tons of VOC emitted from propane offloading, 1.38 tons of VOC emitted from propane loadout and 0.09 tons of VOC emitted from component fugitives. The propane railcar offloading VOC emissions have been based on a maximum of 2,000 railcar offloads per year with a maximum hose length of 12 inches between block valves. The propane truck loadout emissions have been based on a maximum of 6,000 truck loadouts per year with a maximum hose length of 4 inches between the block valves. The component fugitive emissions have been based on 8760 hours per year of operation and emission factors from Table 2-4 of Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017, November 1995.

Regulatory Applicability

The propane terminal is subject to the best available control technology (BACT) requirements of 310 CMR 7.02(8)(a)2. In lieu of an emission-unit-specific top-down BACT analysis, an applicant may propose an emission control limitation by using one or more of the approaches contained in 310 CMR 7.02(8)(a)2.a. though c. 310 CMR 7.02(8)(a)2.b. allows for the proposal of an emission control limitation using a combination of best management practices, pollution prevention and a limitation on the hours of operation and /or raw material usage which is only available if the proposed allowable emissions are less than 18 tons of VOCs per 12 consecutive month period, less than 18 tons of total organic material HAP and less than ten tons of a single organic material HAP.

The facility has proposed to comply with the BACT requirements contained in 310 CMR 7.02(8)(a)2.b. by proposing VOC emission limitations, limiting the propane throughput for truck loadouts and railcar offloading, limiting the number of truck loadouts and railcar offloading, implementing work practices that include a vapor balancing system and limiting the length of hose between block valves. The BACT requirements have been established in Table 2 of this plan approval.

In addition to being subject to the BACT requirements of 310 CMR 7.02(8)(a)2., the facility is subject to the visible emission requirements of 310 CMR 7.06, the dust, odor, construction and demolition requirements of 310 CMR 7.09 and the noise reduction requirements of 310 CMR 7.10.

2. **EMISSION UNIT (EU) IDENTIFICATION**

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
1	Propane Terminal consisting of truck loading and railcar offloading operations. The terminal consists of the following equipment: *Two 60,000-Gallon, Off-White, Bullet Propane Storage Tanks *Five Rail Towers (3 doubles & 2 singles) *Two Loading Racks *Vapor Balancing System	N/A	None

Table 1 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

N/A = Not Applicable

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit
1	1. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, no more than 60,000,000 gallons of propane shall be loaded into trucks in any 12 consecutive month period.	VOC	≤1.5 tons, including component fugitive emissions, in any 12 consecutive month period
	2. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, no more than 60,000,000 gallons of propane shall be offloaded from railcars into storage tanks in any 12 consecutive month period.		
	3. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, no more than 2,000 offloads of propane shall be loaded from railcars into the two 60,000-gallon storage tanks in any 12 consecutive month period.		
	4. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, no more than 6,000 loadouts of propane shall be loaded from the two 60,000-gallon storage tanks into trucks in any 12 consecutive month period.		
	5. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the length of hose between the block valves during a railcar offload shall be limited to no greater than 12 inches.		
	6. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the length of hose between the block valves during a truck loadout shall be limited to no greater than 4 inches.		
	7. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the offloading and loading of propane shall not take place without the use of vapor balancing.		
Facility-Wide	None	VOC	≤1.5 tons in any 12 consecutive month period

Table 2 Key:

EU# = Emission Unit Number

VOC = Volatile Organic Compounds

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, recordkeeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3	
EU#	Monitoring and Testing Requirements
Facility-Wide	1. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13

Table 3 Key:

EU# = Emission Unit Number

Table 4	
EU#	Recordkeeping Requirements
1	<p>1. DCP Midstream, LP shall maintain comprehensive accurate records which shall contain:</p> <ul style="list-style-type: none"> a. the total amount of volatile organic compounds, including fugitive volatile organic compounds, emitted from the EU #1 during each month and each 12 consecutive month period as well as all calculations and supporting data used in determining the emissions. b. the amount of propane, in gallons, loaded into trucks during each month and in each 12 consecutive month period. c. the amount of propane, in gallons, offloaded from railcars into storage tanks during each month and in each 12 consecutive month period. d. the total number of truck loadouts during each month and in each 12 consecutive month period. e. the total number of railcar offloads during each month and in each 12 consecutive month period. <p>2. DCP Midstream, LP shall generate monthly reports in-house that document compliance with the 12 consecutive month period volatile organic compound emission limitation, the 12 consecutive month period propane throughput, as well as the 12 consecutive month period loadout and offloading limitations as specified herein.</p>
Facility-wide	<p>3. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report.</p> <p>4. The Permittee shall maintain records of monitoring and testing as required by Table 3.</p> <p>5. The Permittee shall maintain a copy of this Plan Approval and underlying Application approved herein on-site.</p> <p>6. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.</p> <p>7. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.</p> <p>8. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.</p> <p>9. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.</p>

Table 4 Key:

EU# = Emission Unit Number

USEPA = United States Environmental Protection Agency

Table 5	
EU#	Reporting Requirements
Facility-wide	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	2. The Permittee shall notify the Western Regional Office of MassDEP, BWP Air Permit Chief by telephone, [413-755-2115], email, [marc.simpson@state.ma.us] or fax [413-784-1149], as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the Air Permit Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	3. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP's request.
	4. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	5. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.

Table 5 Key:

EU# = Emission Unit Number

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

- A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	Special Terms and Conditions
1	None
Facility-wide	None

Table 6 Key:

EU# = Emission Unit Number

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest

protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.

- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Cortney Danneker by telephone at 413-755-2234, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Marc Simpson
Air Quality Permit Chief
Bureau of Waste Prevention
Western Region

cc: WERO AQ plan file
WERO AQ approval file

ecc: MassDEP/Boston - Yi Tian
MassDEP/WERO – Peter Czapienski